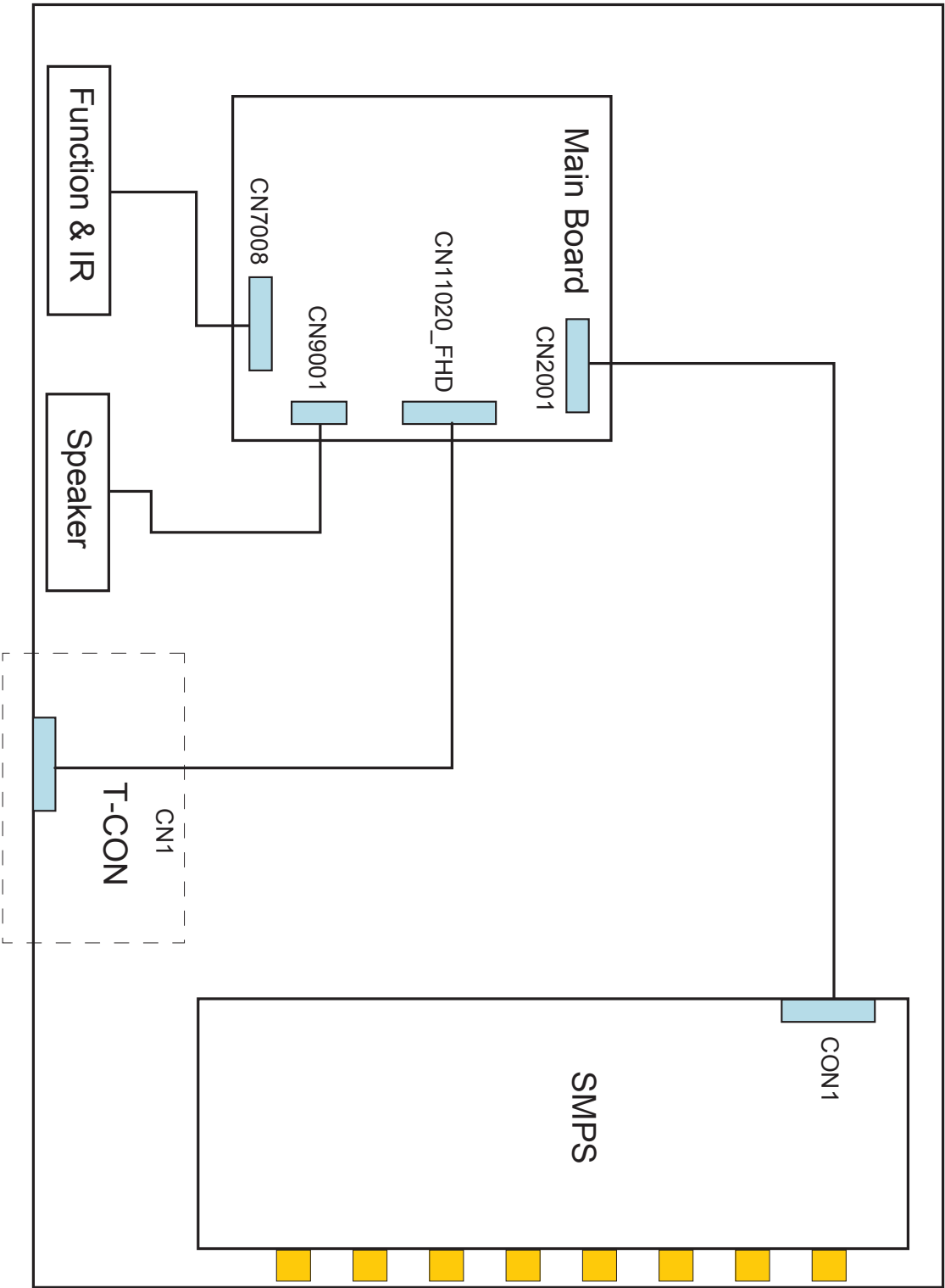


The diagram illustrates the Main Board and its connections to other components. The Main Board is a central rectangular block containing several connectors: CN2001, CN11020\_FHD, CN9001, and CN7008. It is connected to the following components:

- SMPS (Switching Mode Power Supply):** Connected to the Main Board via connector CON1.
- Function & IR:** Connected to the Main Board via connector CN7008.
- Speaker:** Connected to the Main Board via connector CN9001.
- T-CON (Timing Controller):** Connected to the Main Board via connector CN11020\_FHD.

6-2. HD Model Wiring Diagram



| AUO FHD Panel |          |                   |
|---------------|----------|-------------------|
| Pin No        | Symbol   | Description       |
| 1             | Power    | 12V               |
| 2             | Power    | 12V               |
| 3             | Power    | 12V               |
| 4             | Power    | 12V               |
| 5             | Power    | 12V               |
| 6             | GND      | GND               |
| 7             | GND      | GND               |
| 8             | GND      | GND               |
| 9             | GND      | GND               |
| 10            | RO[0]-   | Odd LVDS Signal-  |
| 11            | RO[0]+   | Odd LVDS Signal+  |
| 12            | RO[1]-   | Odd LVDS Signal-  |
| 13            | RO[1]+   | Odd LVDS Signal+  |
| 14            | RO[2]-   | Odd LVDS Signal-  |
| 15            | RO[2]+   | Odd LVDS Signal+  |
| 16            | GND      | GND               |
| 17            | ROCLK-   | Odd LVDS CLK-     |
| 18            | ROCLK+   | Odd LVDS CLK+     |
| 19            | GND      | GND               |
| 20            | RO[3]-   | Odd LVDS Signal-  |
| 21            | RO[3]+   | Odd LVDS Signal+  |
| 22            | NC       | NC                |
| 23            | NC       | NC                |
| 24            | GND      | GND               |
| 25            | RE[0]-   | Even LVDS Signal- |
| 26            | RE[0]+   | Even LVDS Signal+ |
| 27            | RE[1]-   | Even LVDS Signal- |
| 28            | RE[1]+   | Even LVDS Signal+ |
| 29            | RE[2]-   | Even LVDS Signal- |
| 30            | RE[2]+   | Even LVDS Signal+ |
| 31            | GND      | GND               |
| 32            | RECLK-   | Even LVDS CLK+    |
| 33            | RECLK+   | Even LVDS CLK-    |
| 34            | GND      | GND               |
| 35            | RE[3]-   | Even LVDS Signal- |
| 36            | RE[3]+   | Even LVDS Signal+ |
| 37            | NC       | NC                |
| 38            | NC       | NC                |
| 39            | GND      | GND               |
| 40            | SCL      | EEPROM SCL        |
| 41            | NC       | NC                |
| 42            | NC       | NC                |
| 43            | WP       | EEPROM WP         |
| 44            | SDA      | EEPROM SDA        |
| 45            | LVDS_SEL | Open,High/Low     |
| 46            | NC       | NC                |
| 47            | NC       | NC                |
| 48            | NC       | NC                |
| 49            | NC       | NC                |
| 50            | NC       | NC                |
| 51            | NC       | NC                |

| CMO HD Panel |          |               |
|--------------|----------|---------------|
| Pin No       | Symbol   | Description   |
| 1            | NC       | NC            |
| 2            | SCL      | SCL           |
| 3            | SDA      | SDA           |
| 4            | GND      | GND           |
| 5            | R_0-     | LVDS Signal-  |
| 6            | R_0+     | LVDS Signal+  |
| 7            | GND      | GND           |
| 8            | R_1-     | LVDS Signal-  |
| 9            | R_1+     | LVDS Signal+  |
| 10           | GND      | GND           |
| 11           | R_2-     | LVDS Signal-  |
| 12           | R_2+     | LVDS Signal+  |
| 13           | GND      | GND           |
| 14           | R_CLK-   | LVDS CLK-     |
| 15           | R_CLK+   | LVDS CLK+     |
| 16           | GND      | GND           |
| 17           | R_3-     | LVDS Signal-  |
| 18           | R_3+     | LVDS Signal+  |
| 19           | GND      | GND           |
| 20           | NC       | NC            |
| 21           | LVDS_SEL | VESA/JEIDA    |
| 22           | WP       | WP            |
| 23           | GND      | GND           |
| 24           | GND      | GND           |
| 25           | GND      | GND           |
| 26           | VDD      | Panel_VCC_12V |
| 27           | VDD      | Panel_VCC_12V |
| 28           | VDD      | Panel_VCC_12V |
| 29           | VDD      | Panel_VCC_12V |
| 30           | VDD      | Panel_VCC_12V |

| CN2001(POWER) |                 |
|---------------|-----------------|
| 1             | GND             |
| 2             | GND             |
| 3             | DET_5V          |
| 4             | GND             |
| 5             | PWM_DIMMING_OUT |
| 6             | GND             |
| 7             | INVERTER        |
| 8             | ANA_DIMMING_OUT |
| 9             | B13V_PW         |
| 10            | B13V_PW         |
| 11            | B13V_PW         |
| 12            | GND             |
| 13            | GND             |
| 14            | GND             |
| 15            | B5V_PW          |
| 16            | B5V_PW          |
| 17            | B5V_PW          |
| 18            | B5V_PW          |
| 19            | GND             |
| 20            | GND             |
| 21            | GND             |
| 22            | GND             |
| 23            | B12VS_PW        |
| 24            | B12VS_PW        |
| 25            | GND             |
| 26            | GND             |
| 27            | A5V_PW          |
| 28            | GND             |
| 29            | SW_POWER        |
| 30            | MSTAR_H_OUT     |

| CN901 (HDMI1) |                  |
|---------------|------------------|
| 1             | HDMI_RX2+_HDMI   |
| 2             | GND              |
| 3             | HDMI_RX2-_HDMI   |
| 4             | HDMI_RX1+_HDMI   |
| 5             | GND              |
| 6             | HDMI_RX11_HDMI   |
| 7             | HDMI_RX0+_HDMI   |
| 8             | GND              |
| 9             | HDMI_RX0-_HDMI   |
| 10            | HDMI_RXCLK+_HDMI |
| 11            | GND              |
| 12            | HDMI_RXCLK-_HDMI |
| 13            | CEC              |
| 14            | NC               |
| 15            | HDMI_DDC_SCL     |
| 16            | HDMI_DDC_SDA     |
| 17            | GND              |
| 18            | IDENT_HDMI       |
| 19            | HDMI_HOT_PLUG    |

| CN9002(Audio OUT) |                |
|-------------------|----------------|
| 1                 | GND            |
| 2                 | ANY_SC2_SL_OUT |
| 3                 | ANY_SC2_SL_OUT |
| 4                 | GND            |
| 5                 | ANY_SC2_SR_OUT |
| 6                 | ANY_SC2_SR_OUT |

| CN5001(PC IN) |          |
|---------------|----------|
| 1             | PC_RED   |
| 2             | PC_GREEN |
| 3             | PC_BLUE  |
| 4             | UART_TX2 |
| 5             | GND      |
| 6             | GND      |
| 7             | GND      |
| 8             | GND      |
| 9             | PC_5V    |
| 10            | IDENT_PC |
| 11            | UART_RX2 |
| 12            | SDA_D    |
| 13            | H_SYNC   |
| 14            | V_SYNC   |
| 15            | SCL_D    |

| CN6001(USB_SERVICE) |            |
|---------------------|------------|
| 1                   | B5V_USB_PW |
| 2                   | USB_DM     |
| 3                   | USB_DP     |
| 4                   | GND        |

| CN5010(SERVIE JACK) |                |
|---------------------|----------------|
| 1                   | GND            |
| 2                   | SERVICE_ANY_RX |
| 3                   | SERVICE_ANY_TX |
| 4                   | GND            |
| 5                   | GND            |
| 6                   | GND            |
| 7                   | GND            |

| CN5011(PC Sound) |          |
|------------------|----------|
| 1                | GND      |
| 2                | PC_SR_IN |
| 3                | PC_SL_IN |
| 4                | NC       |
| 5                | NC       |
| 6                | NC       |
| 7                | NC       |

| CN7010(OPTICAL JACK) |     |
|----------------------|-----|
| 1                    | VIN |
| 2                    | VCC |
| 3                    | GND |

| CN9001(SOUND OUT) |    |
|-------------------|----|
| 1                 | R+ |
| 2                 | R- |
| 3                 | L+ |
| 4                 | L- |

| CN7008(Function) |            |
|------------------|------------|
| 1                | IR         |
| 2                | GND        |
| 3                | A5V_1_PW   |
| 4                | LED_STB    |
| 5                | NC         |
| 6                | KEY_INPUT1 |
| 7                | KEY_INPUT2 |
| 8                | GND        |
| 9                | A5V_1_PW   |
| 10               | NC         |

| CN7005(Side_AV) |               |
|-----------------|---------------|
| 1               | GND           |
| 2               | IDENT_SIDE_AV |
| 3               | AV2_CVBS      |
| 4               | GND           |
| 5               | SIDE_AV_SR_IN |
| 6               | SIDE_AV_SL_IN |
| 7               | GND           |
| 8               | SIDE_AV_SL_IN |
| 9               | SIDE_AV_SR_IN |

| CN5003(Component1/AV1) |                    |
|------------------------|--------------------|
| 1                      | GND                |
| 2                      | IDENT_AV           |
| 3                      | Comp1_Y / AV1_CVBS |
| 4                      | GND                |
| 5                      | IDENT_Comp1        |
| 6                      | Comp1_Pb           |
| 7                      | GND                |
| 8                      | IDENT_Comp1        |
| 9                      | Comp1_Pr           |

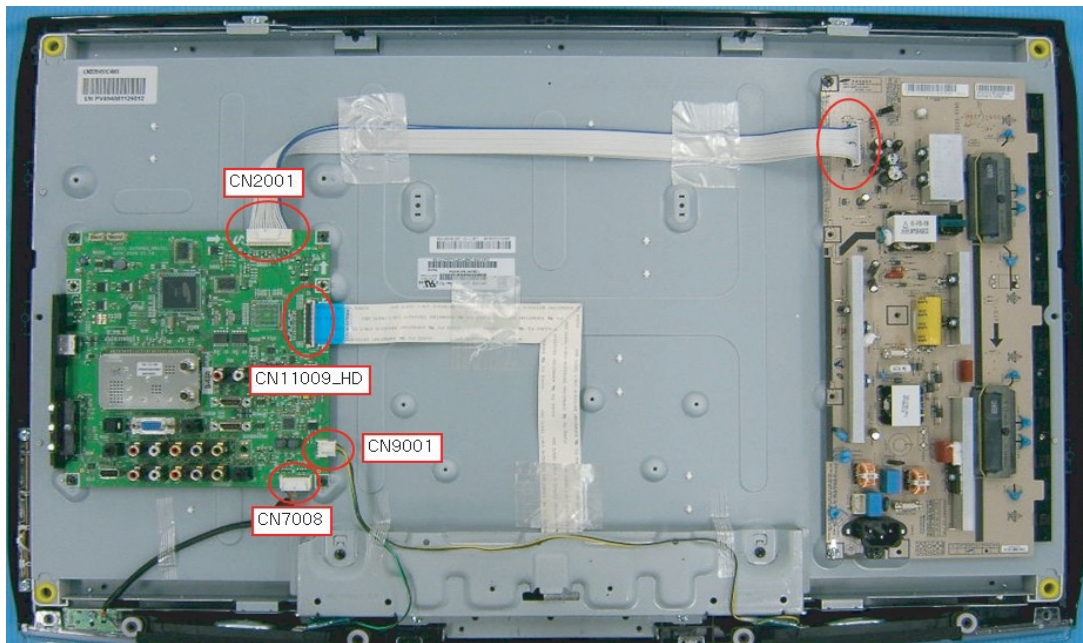
| CN5005(Component2) |             |
|--------------------|-------------|
| 1                  | GND         |
| 2                  | IDENT_COMP2 |
| 3                  | Comp2_Y     |
| 4                  | GND         |
| 5                  | NC          |
| 6                  | Comp2_Pb    |
| 7                  | GND         |
| 8                  | NC          |
| 9                  | Comp2_Pr    |

| CN3204(HeadPhone) |          |
|-------------------|----------|
| 1                 | GND      |
| 2                 | HP_OUT_R |
| 3                 | HP_OUT_L |
| 4                 | HP_OUT_L |
| 5                 | HP_OUT_L |
| 6                 | GND      |
| 7                 | IDENT_HP |

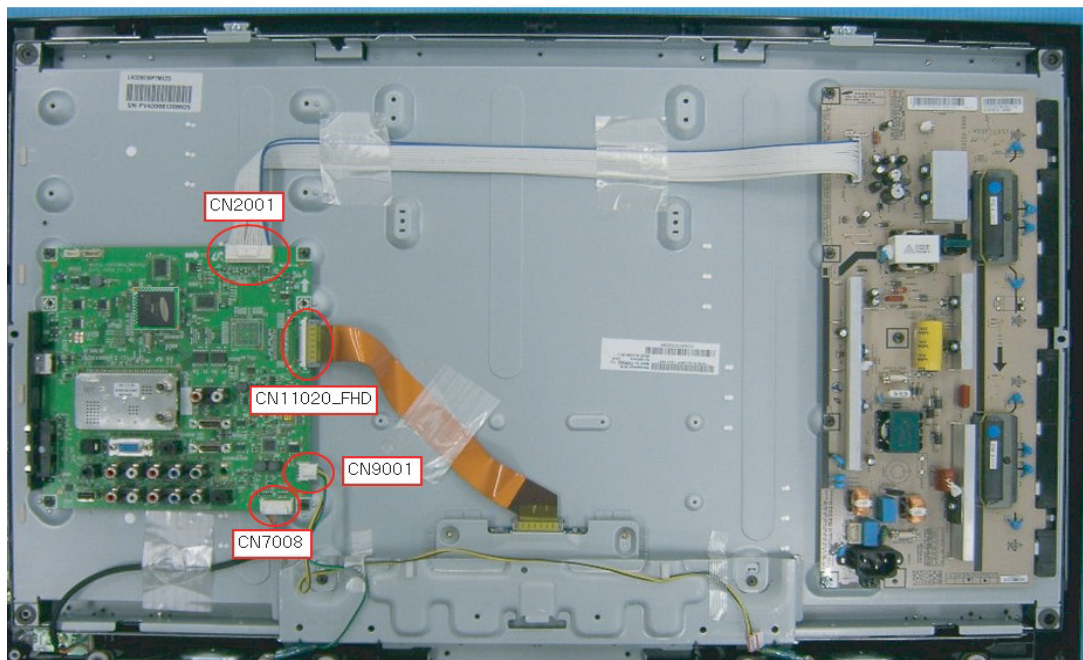
| CN5002<br>(Component1/AV1 Sound) |             |
|----------------------------------|-------------|
| 1                                | GND         |
| 2                                | COMP1_SR_IN |
| 3                                | COMP1_SL_IN |
| 4                                | GND         |
| 5                                | COMP1_SL_IN |
| 6                                | COMP1_SR_IN |

| CN5004<br>(Component2 Sound) |             |
|------------------------------|-------------|
| 1                            | GND         |
| 2                            | COMP2_SR_IN |
| 3                            | COMP2_SL_IN |
| 4                            | GND         |
| 5                            | COMP2_SL_IN |
| 6                            | COMP2_SR_IN |

## 6-2. Wiring Picture



\*HD\_Model



\*FHD\_Model

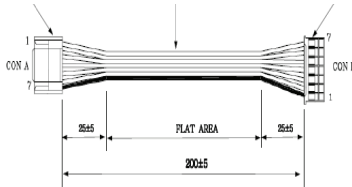
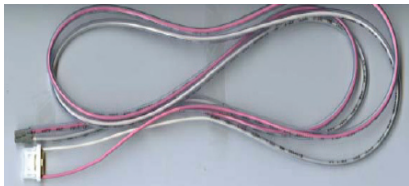
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## 6-3. Connector Functions

| Connector                         | Functions                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| Panel <-> CN11020_FHD, CN11009_DH | The LVDS signal transferred Panel to Main Board.<br>* defective symptom : No picture but normal sound    |
| IP <-> CN2001                     | Supply main power from IP, SMPS to Main Board.<br>* defective symptom : No picture, disable Power On/Off |



## 6-4. Cables

| Code                 | BN96-07611Q(LVDS_HD 40Inch, 435mm)                                                                                                                                                                                                                                                                                            | BN96-07611P(LVDS_HD 37Inch, 375mm)                                                   |         |         |                      |                                                                                      |                      |                      |                      |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------|---------|----------------------|--------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Photo                |                                                                                                                                                                                                                                              |    |         |         |                      |                                                                                      |                      |                      |                      |
| Code                 | BN96-07766K(LVDS_HD 32Inch, 385mm)                                                                                                                                                                                                                                                                                            | BN96-07766K(LVDS_HD 32Inch, 385mm)                                                   |         |         |                      |                                                                                      |                      |                      |                      |
| Photo                |                                                                                                                                                                                                                                              |    |         |         |                      |                                                                                      |                      |                      |                      |
| Code                 | BN39-01099A(26Inch_30P, 400mm)<br>BN39-01099H(32Inch_30P, 500mm)<br>BN39-01099B(37/40Inch_30P, 800mm)<br>BN39-01099K(46Inch_30P, 700mm)                                                                                                                                                                                       |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| Photo                |                                                                                                                                                                                                                                             |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| Code                 | BN96-10075A(LVDS_FHD 46Inch, 350mm)<br>BN96-10076A(LVDS_FHD 37/40Inch, 300mm)<br>BN96-10077A(LVDS_FHD 32Inch, 250mm)                                                                                                                                                                                                          |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| Photo                | <table><tr><th>CODE NO</th><th>DRAWING</th></tr><tr><td>BN96-10077A<br/>250mm</td><td rowspan="4"></td></tr><tr><td>BN96-10076A<br/>300mm</td></tr><tr><td>BN96-10075A<br/>350mm</td></tr><tr><td>BN96-10074A<br/>450mm</td></tr></table> |                                                                                      | CODE NO | DRAWING | BN96-10077A<br>250mm |  | BN96-10076A<br>300mm | BN96-10075A<br>350mm | BN96-10074A<br>450mm |
| CODE NO              | DRAWING                                                                                                                                                                                                                                                                                                                       |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| BN96-10077A<br>250mm |                                                                                                                                                                                                                                           |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| BN96-10076A<br>300mm |                                                                                                                                                                                                                                                                                                                               |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| BN96-10075A<br>350mm |                                                                                                                                                                                                                                                                                                                               |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| BN96-10074A<br>450mm |                                                                                                                                                                                                                                                                                                                               |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| Code                 | BN39-00830B(46Inch_FHD_5P, 200mm)                                                                                                                                                                                                                                                                                             | BN39-01021A(46Inch_FHD_2P, 400mm)                                                    |         |         |                      |                                                                                      |                      |                      |                      |
| Photo                |                                                                                                                                                                                                                                            |  |         |         |                      |                                                                                      |                      |                      |                      |
| Code                 | BN39-01021C(46Inch_FHD_2P, 1100mm)                                                                                                                                                                                                                                                                                            |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |
| Photo                |                                                                                                                                                                                                                                            |                                                                                      |         |         |                      |                                                                                      |                      |                      |                      |

### ■ T-Con Board SVC Parts Code for each Model

| Project | Model Code  | Side Label | T-Con code             | Remark       | Disponibilidad * | STOCK SECH |
|---------|-------------|------------|------------------------|--------------|------------------|------------|
| LB4C    | LN26B450C4M | AO01       | T-Con is built-in type | 2009 Product |                  |            |
|         | LN32B450C4M | CN01       | T-Con is built-in type | 2009 Product |                  |            |
|         | LN37B450C4M | AA01       | BN81-02367A            | 2009 Product |                  |            |
|         | LN40B450C4M | AA01       | BN81-02374A            | 2009 Product |                  |            |
| LB5P    | LN32B530P2M | AA01       | BN81-02345A            | 2009 Product |                  |            |
|         | LN37B530P2M | AA01       | BN81-02368A            | 2009 Product |                  |            |
|         | LN40B530P2M | CN01       | BN81-02390A            | 2009 Product |                  |            |
|         | LN46B530P2M | AA01       | BN81-02381A            | 2009 Product |                  |            |